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Abstract: From 1990 – 2001, 188 captures of 166 different greater sandhill cranes (*Grus canadensis tabida*) were made through the experimental use of alpha-chloralose (AC) in Wisconsin (Hayes et al., 2003). Captures occurred in August (n = 28, 15%), September (n = 136, 72%) and October (n = 24, 13%). Capture of all members in the target social group was relatively high (59%). Territorial pairs were captured more successfully (2 of 2 cranes were captured 69% of the time) than family groups (3 of 3 cranes were captured 50% of the time, and 4 of 4 cranes were captured 59% of the time). Eighteen cranes were captured twice, and two cranes were captured three times using alpha-chloralose. There was no association between dosage provided, month of capture, or target number of cranes captured and capture success. There was also no association between sedation level the cranes experienced and the month that capture occurred. Overall morbidity (6%) and mortality (4%) were lower than most other capture techniques for sandhill cranes. Exertional myopathy was the cause of morbidity in 7 of 12 (58%) cases, and resulted in 3 deaths (all males). Rehabilitation efforts led to the recovery of 4 birds. The rehabilitated cranes were released within 2 weeks after capture, resumed normal behavior (i.e. pairs were not disrupted, etc.), and survived more than 1 year. Sedation level ($X_5^2 = 25.9$, $p < 0.01$) and month of capture ($X_2^2 = 12.3$, $p < 0.01$) were both associated with the presence of exertional myopathy in cranes captured with AC. Logistic regression analysis further suggested lighter sedation with AC and capture during the months of August and October were risk factors for exertional myopathy in this population. A decrease in sedation score by one unit increased the odds of exertional myopathy occurring by three times (i.e., the less sedated the crane, the higher the probability of developing exertional myopathy). Also, the odds of EM occurring during capture in August and October were 15 and 11 times greater compared to September, respectively. In addition to avoiding these risk factors, observing cranes after release and having the option of rehabilitation can lower mortality rates associated with AC capture of cranes.

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Key words: capture techniques, exertional myopathy, *Grus canadensis*, morbidity, mortality, sandhill crane

LITERATURE CITED

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